

SYSTEMS AND METHODS FOR OPTIMIZING BUILDING MATERIALS

ABSTRACT

A system for optimization, where a lowest cost set of building materials or systems that may be used in constructing a structure within given criteria is determined. Project information is inputted into the system, and sets of items, including energy-related products and systems, are determined to be usable based on the project information and given criteria, which may be a desired target or a building code. A value, such as total cost, is calculated for each determined set of items and the set of items with the lowest value is selected and displayed for a user.

A starting point for the optimization process may be determined by calculating a project value of the structure, such a glazing area percentage, and starting an iterating process with items associated with the calculated project value. The system may be implemented over a computer network, such as the Internet, an intranet, a LAN, or a WAN.